



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILIN	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,449	09/20/2003		Chen-Yu Huang	CHA920030020US1	4525
. D.M	7590	10/25/2007		EXAMINER	
James E. Nurr 69 South Gate	Drive		SAINT CYR, LEONARD		
Poughkeepsie, NY 12601				ART UNIT	PAPER NUMBER
				2626	
			•	NAME OF THE PARTY	DELIVERY MODE
				MAIL DATE	DELIVERY MODE
				10/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
	10/664,449	HUANG ET AL.					
Office Action Summary	Examiner	Art Unit					
	Leonard Saint-Cyr	2626					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tin  rill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONE	N. nely filed the mailting date of this communication. D (35 U.S.C. § 133).					
Status							
<ol> <li>Responsive to communication(s) filed on <u>08/08/07</u>.</li> <li>This action is FINAL. 2b) This action is non-final.</li> <li>Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.</li> </ol>							
Disposition of Claims							
4)  Claim(s) 1-16 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-16 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner  9) The specification is objected to by the Examiner  10) The oath or declaration is objected to by the Examiner	epted or b) objected to by the I drawing(s) be held in abeyance. See on is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate					

Art Unit: 2626

### **DETAILED ACTION**

# Response to Arguments

- 1. Applicant's arguments filed 08/08/07 have been fully considered but they are not persuasive.
- 2. Applicant argues that Omoigui does not teach automatically modifying users queries to expand a search (Amendment, page 9).

The examiner disagrees; Omoigui teaches that agents representing queries that are used with server-side and client-side applications to enable efficient, inferential-based queries producing semantically relevant information. Once the user reaches a node in the network, the user has many semantic means of navigating dynamically and automatically using context relatedness to smart agencies and agents (paragraph 74, lines 12 – 15; paragraph 217, lines 24 – 27). Navigating dynamically and automatically using context relatedness to produce semantically relevant information implies automatically modifying users queries to expand a search, since navigation is done automatically.

3. Applicant argues that Omoigui does not teach increasing the terms in a semantic dictionary; nor ranking results (Amendment, page 9).

The examiner disagrees, Omoigui teaches adding automatically agent into Joe's Semantic environment. The information agent performs implicit queries and provides recommendations that include this agent. The result items are in order to determine the

Art Unit: 2626

ranking of the results (paragraph 1112, lines 1 - 3; paragraph 1319, lines 4 - 8). Adding agent to a semantic environment and ranking the results imply increasing the terms in a semantic dictionary; and ranking results, since agents are considered as terms.

### Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. Correction of the following is required. Claims 9 – 16 disclose "computer program on a computer usable medium", but there is no definition or explanation in the specification of the instant application as to what type the medium is used to store the computer program.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Omoigui (US PAP 2003/0126136).

Art Unit: 2626

As per claims 1, and 9, Omoigui teaches a self-enhancing search system comprising:

a semantic taxonomy containing semantic nodes in a hierarchical structure (paragraph 705; paragraph 217, line 8);

a search system text analyzer that periodically looks through documents and identifies semantic node terms in the semantic taxonomy applicable to terms used in the document ("document as a tree of nodes"; paragraph 317, lines 5 – 7; paragraph 1230);

a semantic binder attaching the documents to a semantic node term applicable to terms used in the documents ("testing whether or not a node matches a pattern"; paragraph 166; paragraph 317, lines 1 – 7; paragraph 311, lines 1 - 3); and

relevant document finder which automatically enhances a user's query with a semantic node term applicable to the users query and based on the enhanced query including the semantic node term locates documents which do not contain a match for the users query but contain other search terms that belong to the semantic node applicable to a user's search ("once the user reaches a node in the network, the user has many semantic means of navigating dynamically and automatically using context relatedness to smart agencies and agents"; paragraph 510, lines 1 –5; paragraph 74, lines 12 – 15; paragraph 217, lines 24 – 27).

As per claims 2, and 10, Omoigui further discloses the enhanced search query automatically includes both "the user's search query" OR "the semantic node" to

Art Unit: 2626

automatically without user intervention locate documents that contain a match for either the users search query term or related to the semantic node ("the user has many semantic means of navigating dynamically and automatically using context relatedness to smart agencies and agents"; paragraph 466, line 12; paragraph 217, lines 24 – 27).

As per claims 3, and 11, Omoigui further discloses a semantic dictionary which defines user query terms in accordance with the semantic nodes in a semantic dictionary ("invokes the query onto the database that hosts the semantic metadata"; paragraph 638, lines 12 – 14).

As per claims 4, and 12, Omoigui further discloses a semantic dictionary builder which systematically examines the system log off line new queries to increase the terms in the semantic dictionary (" automatically adds the agent into Joe's semantic environment that performs implicit queries"; paragraph 1319, lines 1-7).

As per claims 5, and 13, Omoigui further discloses ranking the results of searches using the enhanced queries to place terms in the semantic dictionary in order of most often used query terms ("ranked by relevance"; paragraph 1319, lines 1-7; paragraph 1112, lines 1-3).

As per claims 6, and 14, Omoigui further discloses that the semantic binder includes:

Art Unit: 2626

a sub-module that identifies domain specific terms ("domain specific semantic information") in a given query, using domain specific glossary (paragraph 71);

a submodule that finds synonyms ("same meaning") and related terms for the identified terms, using domain specific thesaurus (paragraph 19, lines 13 - 15);

a submodule that finds other statistically close terms ("new semantic links that are based on probabilistic inferences"; paragraph 623, lines 1-3); and

a submodule that identifies relevant domain specific categories for the identified terms, using domain specific ontology (paragraph 71, lines 17 –21; paragraph 258).

As per claims 7, and 15, Omoigui further discloses a submodule that binds queries in the identified semantic taxonomy categories, using the results of the text analyzer ("ontology and categories corresponding to taxonomy for each semantic domain ... responds to semantic queries"; paragraph 670, lines 8 – 11).

As per claims 8, and 16, Omoigui further discloses a submodule that adds new doc-query links to the meta-data of the corresponding textual index entries to link the documents to the semantic taxonomy categories ("adding, removing and updating entries in the semantic metadata store"; paragraph 248; paragraph 269; paragraph 670, lines 8 – 11; paragraph 582).

#### Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard Saint-Cyr whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS 10/15/07

Page 8